



# Advanced Manufacturing Career Pathway

## 7 Rivers 2020-2021



**EXPLORE:** Click on the links to find the job titles that seem most interesting to you to learn more! Save any jobs you are interested in from this career pathway in your XELLO account so that you can create an Academic and Career Plan (ACP) later on.

Educational Level May also require work experience	Production	Engineering and Design	Industry 4.0	Electro-Mechanical	Supply Chain
High School Diploma, Certification	<a href="#">Engine/Machine Assembler</a> ○, <a href="#">Data Entry Clerk</a> ○, <a href="#">General Laborer</a> , <a href="#">Shipping &amp; Receiving Clerk</a> ○, <a href="#">Packager</a> Range \$19,150-\$64,480				
Certification or Technical Diploma	<a href="#">Paint Technician</a> * <a href="#">Food Processing Operator Welder</a> * <a href="#">Sheet Metal Worker</a> ○* <a href="#">Production Technician</a> * Range \$21,720-\$88,070	<a href="#">CAD Drafter Quality Assurance Technician</a> *  Range \$30,050-\$92,010	<a href="#">Robotic Welder</a> * <a href="#">Quality Controller</a> ○* <a href="#">Robotics Technician</a> *  Range \$29,470-\$93,450	<a href="#">Electrical Engineering Tech</a> ○* <a href="#">Industrial Engineering Tech</a> ○* <a href="#">Industrial Maintenance Mechanic</a> ○* Range \$34,410 - \$96,690	<a href="#">Robotics and Material Handler Technician Inventory Control</a> *   Range \$21,410-\$76,100
Registered Apprenticeship	<a href="#">Industrial Pipefitter</a> * <a href="#">Tool and Die Maker</a> * <a href="#">Pattern Maker Machinist</a> ○* <a href="#">Mold Maker</a>  Range \$24,400-\$97,170		<a href="#">Electrical Discharge Machining Technician</a>   Range \$36,190-\$96,690	<a href="#">Millwright</a> ○* <a href="#">CNC Technician</a> * <a href="#">Industrial Electrician</a> * <a href="#">Industrial Machinery Technician</a> ○ <a href="#">Maintenance Mechanic</a> ○* <a href="#">Mechatronics Technician</a> * Range \$24,600-\$96,580	
Associate Degree	<a href="#">Manufacturing Machine Operator</a> ○*   Range \$25,010-\$53,770	<a href="#">Drafter</a> ○*   Range \$36,350-\$92,010	<a href="#">Electronics Engineering Tech</a> ○ <a href="#">Computer Network Specialist</a> ○ <a href="#">Manufacturing Engineer Tech Business Analyst</a> * <a href="#">Chemical Engineering Tech</a> ○ Range \$31,110-\$158,060	<a href="#">Mechanical Engineering Technician Electrical Engineer Technician Electro-mechanical Technician</a>  Range \$35,140-\$96,690	<a href="#">Buyer Production Planner Logistics Analyst</a>   Range \$30,190-\$120,400
Bachelor Degree and beyond	<a href="#">Manufacturing Manager</a> ○* <a href="#">Operations Manager</a>  Range \$45,050-\$208,000	<a href="#">Electrical Engineer</a> ○ <a href="#">Mechanical Engineer</a> ○ <a href="#">Environmental Engineer</a> ○ <a href="#">Quality Controller</a> ○* Range \$30,050-\$155,880	<a href="#">Process Engineer</a> * <a href="#">Business Intelligence Analyst Chemical Engineer Computer Scientist</a> ○* Range \$52,720-\$189,780	<a href="#">Industrial Engineer</a> ○* <a href="#">Manufacturing Engineer</a> * <a href="#">Electrical Engineer</a> ○  Range \$57,290-\$155,880	<a href="#">Supply Chain Analyst Procurement Manager Data Warehouse Analyst</a> *  Range \$51,800-\$193,400
Postsecondary Options	Click <a href="#">HERE</a> for Postsecondary Options	Click <a href="#">HERE</a> for Postsecondary Options	Click <a href="#">HERE</a> for Postsecondary Options	Click <a href="#">HERE</a> for Postsecondary Options	Click <a href="#">HERE</a> for Postsecondary Options

\* **BRIGHT OUTLOOK** = these jobs are expected to grow in the future – which means more opportunities for you!  
 ○ **XELLO** = you can learn more and save this job in your Xello account (note: some job titles might look a little different in Xello)



# Advanced Manufacturing Career Pathway In High School



A career pathway in high school must include:

- A sequence of courses (including at least 2 CTE courses)
- Two of the following components: *Career and Technical Student Organization, Work-based Learning, Industry Recognized Credential, College Credit Opportunity*

<b>Career and Technical Education Courses</b>	Must include a sequence of at least TWO Career and Technical Education courses. Should align with <a href="#">Education Building Blocks</a> for the pathway: <ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>				<b>CAREER EXPLORATION PROGRAMS</b>					
<b>Relevant Academic Courses</b>	Should align with <a href="#">Education Building Blocks</a> for this pathway: <ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>				Regional: <ul style="list-style-type: none"> <li>• <a href="#">CESA 4/Mississippi Valley YA</a></li> <li>• <a href="#">Bluffview YA</a></li> <li>• <a href="#">Inspire 7 Rivers</a></li> <li>• <a href="#">Destinations Career Academy - Operating Engineers Pre Apprenticeship</a></li> <li>• <a href="#">E3 Works!</a></li> <li>• <a href="#">First Robotics WI</a></li> </ul> Local: <ul style="list-style-type: none"> <li>• <a href="#">TUMMA Opportunities</a></li> </ul>					
<b>Career and Technical Student Organization</b>	<a href="#">SkillsUSA</a>									
<b>Work-Based Learning Program Options</b>	<ul style="list-style-type: none"> <li>• <a href="#">Employability Skills</a> (90 hrs)</li> <li>• <a href="#">Youth Apprenticeship-Manufacturing</a> / (450 hrs/year; 1-2 years)</li> <li>• Local Internship/Local Work-based Learning Programs that meet <a href="#">state quality requirements</a></li> </ul>									
	<b>Production</b>	<b>Engineering and Design</b>	<b>Industry 4.0</b>	<b>Electro-Mechanical</b>	<b>Supply Chain</b>					
<b>Industry Recognized Credential Options</b> Learn the skills that employers want to see!  <i>Italics = must be 18 years old to obtain</i>  <i>*This certification is eligible for reimbursement through the technical incentive grant</i>	<p style="text-align: center;"><u>OSHA 10-General Industry Version</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="301 858 697 1236" style="width: 25%; vertical-align: top;"> <a href="#">American Welding Society (AWS) Level 1 Entry Welder</a> *   <a href="#">Manufacturing Skills Standards Council-Certified Production Technician (full program or any of the modules)</a> *   <a href="#">National Institute for Metal Working Skills (NIMS)-</a> <ul style="list-style-type: none"> <li>• <a href="#">Industrial Technology Maintenance Level 1</a>,</li> <li>• <a href="#">Machining Level</a> *</li> <li>• <a href="#">Metalforming Level 1</a> *</li> </ul> </td> <td data-bbox="697 858 1035 1236" style="width: 25%; vertical-align: top;"> <a href="#">The Association for Packaging and Processing Technologies Mechatronics Certification</a>   <a href="#">Certified Solidworks Associate</a>   <a href="#">Snap On-Precision Measurement Instruments, Multimeter, Mechanical and Electronic Torque Certification</a> *         </td> <td data-bbox="1035 858 1325 1236" style="width: 25%; vertical-align: top;"> <a href="#">Smart Automation Certification Alliance (SACA)-Associate Level</a>   <a href="#">NC3 Industry 4.0 and Mechatronics</a> </td> <td data-bbox="1325 858 1580 1236" style="width: 25%; vertical-align: top;"> <a href="#">NC3 Industry 4.0 and Mechatronics</a> </td> <td data-bbox="1580 858 1918 1236" style="width: 25%; vertical-align: top;"> <a href="#">Lean Six Sigma (ASQ)</a>   <a href="#">MSSC-Certified Logistics Technician (CLT)</a> </td> </tr> </table>					<a href="#">American Welding Society (AWS) Level 1 Entry Welder</a> *  <a href="#">Manufacturing Skills Standards Council-Certified Production Technician (full program or any of the modules)</a> *  <a href="#">National Institute for Metal Working Skills (NIMS)-</a> <ul style="list-style-type: none"> <li>• <a href="#">Industrial Technology Maintenance Level 1</a>,</li> <li>• <a href="#">Machining Level</a> *</li> <li>• <a href="#">Metalforming Level 1</a> *</li> </ul>	<a href="#">The Association for Packaging and Processing Technologies Mechatronics Certification</a>  <a href="#">Certified Solidworks Associate</a>  <a href="#">Snap On-Precision Measurement Instruments, Multimeter, Mechanical and Electronic Torque Certification</a> *	<a href="#">Smart Automation Certification Alliance (SACA)-Associate Level</a>  <a href="#">NC3 Industry 4.0 and Mechatronics</a>	<a href="#">NC3 Industry 4.0 and Mechatronics</a>	<a href="#">Lean Six Sigma (ASQ)</a>  <a href="#">MSSC-Certified Logistics Technician (CLT)</a>
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<b>College Credit Opportunities</b>	You can find the list of college credit opportunities included in the postsecondary options for this pathway <a href="#">HERE</a> .									